

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method for moistening a web of paper or paperboard comprising:

~~forming a steam atmosphere in~~ feeding steam into a steam blow cavity open toward the web ~~by feeding steam into the cavity to form a steam atmosphere; [[and]]~~

applying a spray of liquid heated to a temperature higher than an ambient temperature from at least one nozzle onto the web in the steam atmosphere; and

wherein the liquid is heated by a source separate from the steam.

2. (previously presented) The method of claim 1, wherein the temperature of the liquid applied as a spray is 70 to 95°C.

3. (previously presented) The method of claim 1, wherein the temperature of the liquid applied as a spray is 30 to 99°C.

4. (currently amended) The method of claim 1, wherein the step of feeding steam comprises injecting the steam ~~and the liquid required for establishing the steam atmosphere are injected~~ from the same nozzle used to apply the heated liquid.

5. (previously presented) The method of claim 1, wherein the steam and the liquid required for establishing the steam atmosphere are injected from separate nozzles.

6. (previously presented) The method of claim 1, wherein an atmosphere of saturated steam is formed in the steam cavity.

7. (previously presented) The method of claim 1, wherein the steam is water vapor and the liquid is water.

8. (previously presented) The method of claim 1, wherein the temperature of the liquid being applied as a spray is controlled in a cross-machine direction.

9. (previously presented) The method of claim 1, wherein an amount of the liquid being applied as a spray is controlled in a cross-machine direction.

10. (previously presented) The method of claim 8, wherein the temperature or a flow rate of the liquid being applied as a spray is adjusted in a cross-machine direction with a control system that takes measurements of the web.

11. (currently amended) An apparatus for moistening a web of paper or paperboard comprising:

a steam blow cavity that is open toward a moving web;

at least one nozzle for feeding at least steam into the steam blow cavity so as to form a steam atmosphere; ~~[[and]]~~

at least one nozzle for applying a spray of a liquid heated to a temperature higher than an ambient temperature onto the web in the steam atmosphere; and

a heating device for heating the liquid using a source separate from the steam.

12. (previously presented) The apparatus of claim 11, wherein at least one of the nozzles is a dual-channel nozzle capable of injecting both steam and liquid.

13. (previously presented) The apparatus of claim 11, wherein separate nozzles are used for injecting the steam and the liquid.

14. (previously presented) The apparatus of claim 11, further comprising a means adapted to the nozzles for heating the steam or liquid ejected therefrom and for controlling the temperature of the steam or liquid ejected therefrom.

15. (previously presented) The apparatus of claim 11, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

16. (currently amended) The method of claim 2, wherein the step of feeding steam comprises injecting the steam and the liquid required for establishing the steam atmosphere are injected from the same nozzle used to apply the heated liquid.

17. (currently amended) The method of claim 3, wherein the step of feeding steam comprises injecting the steam and the liquid required for establishing the steam atmosphere are injected from the same nozzle used to apply the heated liquid.

18. (previously presented) The method of claim 2, wherein the steam and the liquid required for establishing the steam atmosphere are injected from separate nozzles.

19. (previously presented) The method of claim 3, wherein the steam and the liquid required for establishing the steam atmosphere are injected from separate nozzles.

20. (previously presented) The method of claim 2, wherein an atmosphere of saturated steam is formed in the steam cavity.

21. (previously presented) The method of claim 3, wherein an atmosphere of saturated steam is formed in the steam cavity.

22. (previously presented) The method of claim 4, wherein an atmosphere of saturated steam is formed in the steam cavity.

23. (previously presented) The method of claim 5, wherein an atmosphere of saturated steam is formed in the steam cavity.

24. (previously presented) The method of claim 2, wherein the steam is water vapor and the liquid is water.

25. (previously presented) The method of claim 3, wherein the steam is water vapor and the liquid is water.

26. (previously presented) The method of claim 4, wherein the steam is water vapor and the liquid is water.

27. (previously presented) The method of claim 5, wherein the steam is water vapor and the liquid is water.

28. (previously presented) The method of claim 6, wherein the steam is water vapor and the liquid is water.

29. (previously presented) The method of claim 9, wherein the temperature or a flow rate of the liquid being applied as a spray is adjusted in a cross-machine direction with a control system that takes measurements of the web.

30. (previously presented) The apparatus of claim 12, further comprising a means adapted to the nozzles for heating the steam or liquid ejected therefrom and for controlling the temperature of the steam or liquid ejected therefrom.

31. (previously presented) The apparatus of claim 13, further comprising a means adapted to the nozzles for heating the steam or liquid ejected therefrom and for controlling the temperature of the steam or liquid ejected therefrom.

32. (previously presented) The apparatus of claim 12, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

33. (previously presented) The apparatus of claim 13, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

34. (previously presented) The apparatus of claim 14, wherein the apparatus is located in a dryer section, calender section or therebetween of a paper/paperboard manufacturing line.

35. (New) The method of claim 1, wherein the liquid is heated before entering the at least one nozzle.

36. (New) The method of claim 1 further comprising controlling the temperature of the heated liquid.

37. (New) The method of claim 36, wherein the step of controlling the temperature comprises heating the at least one nozzle.